

Remarks/Arguments

The claims have been amended to better represent the scope of the invention. Claim 7 has been added and is based on information in the specification as originally filed on page 5, lines 22-28. No new matter has been added.

35 U.S.C. §103

Claims 1 and 3-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Badger et al., (US Pat. #5,739,847) in view of Shin. (US Pat. #6,108,044).

It is submitted that combination of Badger et al., and Shin do not teach or suggest a

"a frequency conversion stage, coupled to said tuner, for converting in frequency the digital signal to an intermediate frequency (IF) signal to be output, where the center frequency of said IF signal is capable of being switched to a nominal frequency corresponding to the selected broadcast channel or to a second frequency being shifted from said nominal frequency *in accordance with the presence or absence of said interference determined by said determining means*"

as recited by the current claim 1. (emphasis added)

The present invention recites a means for determining the presence of an interference and selecting the center frequency of the IF in response to the presence of that interference. One of the desirable features of the invention is to shift the center frequency of the IF when an interference is present on an adjacent channel. This capability, as explained in an exemplary embodiment (page 2, lines 23-28) provides that the IF signal can be pushed further towards the band edge of filter, thereby further attenuating an adjacent interference if such interference is determined to be present. If no interference is present, the IF signal is adjusted to a predetermined nominal operating frequency with respect to the filter.

Neither Badger nor Shin teach or remotely suggest this invention.

Shin teaches the generation of a detection signal wherein a controller is notified of the presence of an NTSC signal in the output of an HDTV signal. When both signals are present, either the HDTV signal or the NTSC signal is processed according to the selection by the user. The system taught in Shin merely teaches generation of a control signal when a television signal is detected. Shin does not remotely teach or suggest selecting the center frequency of the IF in response to the presence of an adjacent channel interference.

Badger still teaches a system where the LO frequency of a satellite tuner operates in a "fine tuning" mode to fine tune the IF frequency of an incoming signal such that the IF frequency of the incoming signal matches up with the nominal center frequency of IF SAW filter. Badger in now way teaches or remotely suggests a frequency conversion stage wherein "the center frequency of said IF signal is capable of being switched to a nominal frequency corresponding to the selected broadcast channel or to a second frequency being shifted from said nominal frequency in accordance with the presence or absence of said interference determined by said determining means" as recited by the present claim 1.

It is therefore submitted that neither Badger, Shin, nor the combination thereof, remotely teach or suggest shifting the center frequency of an IF signal in response to the presence of adjacent channel interference. Therefore, it is submitted that the present claim 1 is allowable and such action is respectfully requested. Furthermore, it is submitted that independent claim 5 is allowable for at least the same reason that claim 1 is allowable and such action is respectfully requested. Since dependant claims 2-4, and 6-7 are dependant on allowable claims 1 and 5, it is submitted that they are allowable for at least the same reasons that claims 1 and 5 are allowable and such action is respectfully requested.

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's representative at (609) 734-6804, so that a mutually convenient date and time for a telephonic interview may be scheduled.

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account 07-0832.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this amendment is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Commissioner for Patents, Alexandria, Virginia 22313-1450 on:

21 JUNE 2006
Date

Brian J Cromarty